GLENN MYERS, M.D. (Compton Sanitarium, Compton).—Persons of very low-grade intelligence are little trainable, and constitute principally a custodial problem. If home conditions are adequate, they generally may be cared for at home. Otherwise they must be cared for in institutions. Such patients have such close supervision that, for the most part, they are not dangerous to the public.

Persons of higher grade intelligence defect are better trainable. The extent of trainability depends upon (*a*) the degree of intelligence defect, and (*b*) the stability of personality reactions. The lower the degree of intelligence the less is the individual trainable. An individual with a moderate degree of intelligence defect may be untrainable because of personality traits that interfere with trainability. With due regard for the importance of decreased control of natural impulses that results through even moderate intelligence defect, a careful study discloses that unstable behavior patterns of persons with the higher grades of intelligence defect generally depend upon the environmental influences that the persons have experienced since they came into the world. The term "environmental" is here used in its widest sense. Those persons of moderate degree of intelligence defect, whose environmental influences have all been good and consistent with the degree of their intelligence defect, are generally good citizens within the limitations of their adaptability as determined by the limitations of their intelligence.

The procedure of sterilization of persons with intelligence defect is, in my opinion, an entirely proper one. It should, nevertheless, be effected only after a careful study of the particular patient. Many neuropsychiatric conditions that formerly were believed to have been inherited, with greater knowledge have proved to be due to environmental causation. Intelligence defect continues to be the outstanding neuropsychiatric condition that is regarded to have been inherited. There has been some modification even of this viewpoint, as well as modification of the belief that the degree of intelligence defect is absolute from birth onward through the individual's life. "Intelligence" has been found to be complex when broken down into its component parts, and is not the simple organically determined state that it was formerly thought to be.

There are rather definite organic laws for the transmission of intelligence defect, and those persons with a considerable degree of intelligence defect should not be permitted to have children. They and their defective children are not able to take their place properly in the constructive program of our world. Sterilization of those persons as a safety-first procedure should be practiced whether the patients are cared for in their homes or in institutions. There is in this connection a definite responsibility to the world to prevent the multiplication of such defective persons, who are a liability to the world from many social and economic aspects.

While the persons with marked intelligence defect have less opportunity to bring children into the world and may, if their defect is sufficiently marked, be sterile without the necessity of artificially making them so, those persons with a higher degree of intelligence defect comprise a more serious problem. They generally have much more opportunity to bring defective children into the world. They are easily led into sexual implications. They are generally prolific and fail to use good judgment about the number of children for whom they can be responsible, and for the effects upon the world of their having children. Sterilization serves great advantage to our civilization in weeding out such unfit members thereof.

All circumstances in connection with each individual patient should be carefully determined and weighed before coming to conclusions about sterilization; but the practice of the procedure should be waived only when the circumstances are preponderatingly in favor of bringing good substantial citizens into this world which we try to improve.

THE LURE OF MEDICAL HISTORY*

MEDICAL LIBRARIES†

By MILDRED S. FARROW
San Diego

II‡

EARLY EDITIONS OF MEDICAL TEXTBOOKS

HAVING considered, to some extent, the establishment of medical libraries, I will briefly review some of the early American editions of medical textbooks. Dr. John R. Cox, a professor at the University of Pennsylvania, published in 1806 the American Dispensatory. Dr. Caspar Wistar was the author of a system of anatomy which was very popular in his day. Dr. Nathaniel Chapman wrote a book on materia medica and therapeutics, and Dr. John Eberle on the practice of medicine. Dr. Robley Dungleson was the author of a medical dictionary which was the standard for many years. Dr. John C. Dalton, the first to introduce animal experimentation into the medical schools, became prominent as the author of a textbook on physiology which was used in many colleges. Dr. Austin Flint prepared an exceedingly popular textbook on the practice of medicine. Dr. Oliver Wendell Holmes, the genial author of the "Autocrat of the Breakfast Table," and professor of anatomy for a long time at Harvard Medical College, rendered a great service to the medical profession by calling attention to the contagiousness of puerperal fever—an honor which he shared with Professor Semmelweiss of Vienna. However, aseptic midwifery was advocated as early as 1773, when Dr. Charles White, a Manchester surgeon, made his plea for surgical cleanliness in obstetrics. Dr. William Dewees was the author of a textbook on the diseases of children which reached a tenth edition, while his "Midwifery" attained a twelfth printing.

MEDICAL JOURNALS OF AMERICA REFLECT THE DEVELOPMENT OF AMERICAN MEDICINE

Through the study of these old medical journals and textbooks, we are able to acquire an insight into the history of American medicine.

The eighteenth century practitioner had to be a very keen observer, as those were the days before the stethoscope, the clinical thermometer, the ophthalmoscope or laryngoscope, and the microscope had come into use for clinical purposes; so that the practice of medicine was, to a large extent, governed along empirical lines.

It was only when scientific medicine was being developed that we began to learn the etiology

*A Twenty-Five Years Ago column, made up of excerpts from the official journal of the California Medical Association of twenty-five years ago, is printed in each issue of CALIFORNIA AND WESTERN MEDICINE. The column is one of the regular features of the Miscellany department, and its page number will be found on the front cover.

† From the library of the San Diego County Medical Society.

Read before the Altrusa Club of San Diego, September 12, 1934.

‡ Part I of this paper was printed in the December issue of CALIFORNIA AND WESTERN MEDICINE, page 401.

of the various diseases. The earliest vaccination against smallpox in the United States was performed by Doctor Waterhouse in 1800. Malarial fever was supposed to be due to foul air until 1880, when Laveran found parasites in the blood of malarial patients, and the etiology of yellow fever remained in doubt until 1900-1901. Tuberculosis existed for thousands of years and the clinical symptoms had been described quite accurately by Hippocrates, who thought that it was caused by the secretions of the head flowing into the bronchi; and it was not until Koch, in 1882, isolated the tubercle bacillus, that the true etiology was discovered.

During the past fifty years, medical science has undergone a greater growth than that which has taken place during the twenty-three centuries since Hippocrates. Until a comparatively few years ago, there was no science of bacteriology, no explanation of the origin of disease, rational treatment, aseptic surgery, the rôle of insects, x-ray or radium, and no serological diagnosis, especially of value in the diagnosis of syphilis or immunology.

We accept these advances in medical science with very little thought or appreciation of the laborious work of the investigator.

Textbooks in those days were very expensive, and students often passed their notebooks down to their successors. We of this age often fail to realize the great value of medical books to the profession and to the public.

THE MEDICAL LIBRARY'S PLACE IN THE DEVELOPMENT OF THE COMMUNITY

A medical library is an essential part of the educational feature of the community. A good medical library can help to elevate the standard of the medical profession, to improve medical practice and to enrich the teaching of medical students and nurses.

Research and discovery all help to contribute toward the health and hygiene of the community as a whole. The physician must keep up with the changing methods of diagnosis and treatment. One cannot purchase all the new books, or subscribe to all of the medical periodicals which contain the latest facts and opinions upon the different branches of medicine. In reality, the medical library is a postgraduate school for the physician. In its periodicals he finds the latest medical knowledge which he is able to use for the greatest benefit to himself and his patient.

In the laboratory, the research worker must know what has been done in the past, and for that purpose a good medical library is necessary not only to the physician but also to the laboratory investigator or biologist. The medical student must be encouraged to form habits of research, to examine original sources and to make investigations for himself. The progressive physician depends, to a large extent, upon medical journals, especially those specializing. Here he obtains the latest treatment of disease and is able, in the well-equipped library, to have access to a large number of medical periodicals published in many languages. When a new discovery is made, it is not long before the entire medical world learns of it.

If a medical man tried to supply his private library with the many medical journals published, he would find that it not only was prohibitive in cost, but in the space necessary to house such a collection.

In the medical profession there has been considerable discussion as to the relative value of medical journals and medical books. Journals often contain much that is only the experience of the author, and it is necessary to separate the wheat from the chaff. Textbooks, on the other hand, are the result of more mature judgment and, as a rule, only that treatment which has the approval of the profession is recommended. However, it frequently occurs that by the time a textbook is published it is behind the times—so rapid is the progress of the medical sciences.

THE NEED OF MEDICAL LIBRARIES

It is my opinion that a greater responsibility than ever rests upon the medical profession in giving sound advice upon medical subjects, especially those of preventive medicine and hygiene. This also is necessary in order to preclude, as far as possible, unwise laws from being placed on our statute books, as we are still, in some regards, living in the Middle Ages.

It is also very necessary to turn to medical literature while studying disease in order to learn of the experiences of the past. Many diseases present different variations over a course of years. There is frequently a marked variation in the severity and course of the symptoms.

There is often, too, a tendency toward an intellectual rut if there is nothing to spur one on. There are so many new discoveries, especially in endocrinology, for example, that if one does not consult the medical journals frequently, he will fall hopelessly behind, as what was accepted yesterday may be obsolete on the morrow.

ADMINISTRATION OF A MEDICAL LIBRARY

A medical library is of little value unless it is properly classified and catalogued, and in order to accomplish this someone must be in charge who is trained in medical literature. Another advantage to the busy physician is that of being able to obtain the desired information quickly—which leaves him more time for the study of his patient. A review of medical literature also helps one to avoid the mistakes of the past and the duplication of effort.

Doctor Jacobi has called attention to the fact that many of our modern discoveries were suggested years ago, and that if proper attention had been paid to the writings at the time, it would not have been necessary for suffering humanity to be compelled to wait so long for relief.

The medical librarian should also keep abreast of the times if he or she is to be of the greatest possible service, and should have a comprehensive

knowledge of medical literature, the new treatments being advocated and, through the public health reports, should know of the prevailing diseases and when these diseases are epidemic in character. Such a librarian should be able to lay hand upon the latest information on the subject and so anticipate the needs of the physician.

Very few of the general public realize that scientific medicine is keeping pace with the other branches of science. Medical advances are often unnoticed for some time, except by members of the medical profession, due to the lack of publicity, as was the case with the airplane, the radio and various other discoveries now in the public eye.

FACTORS WHICH MAKE FOR THE SUCCESS OF A MEDICAL LIBRARY

The success of a medical library is dependent upon the following factors: proper housing, trained personnel, and sufficient funds to keep the collection up to date. It is not the quantity but the quality that counts in medical literature, and I know of no greater opportunity for the philanthropist in the alleviation of human suffering than to provide proper endowment of a local medical library. This would help the physician to give to both the rich and the poor the very best treatment known to medical science.

IN CONCLUSION

To me, a medical library is filled with interest in that it contains the records of the marvelous achievements in the field of medicine. In the literature housed in each medical library are the records of the unselfish devotion of thousands of physicians and nurses in their efforts to relieve suffering.

It is regrettable that, to the memory of great military leaders like Napoleon and others, the world erects monuments, while many of the greatest benefactors of the human race go unnoticed and unheralded. Their names, however, live on in the pages of medical history enshrined in the medical libraries throughout the world.

1410 Medico-Dental Building.

Substitute for Cocain and Procain in Rhinolaryngology. Gatewood states that the 2.5 per cent solution of nupercain has proved to be a most satisfactory agent for causing topical anesthesia prior to such operations as submucous resection, ethmoidectomy, intranasal antrotomy and turbinectomy. The 2.5 per cent solution of nupercain produces prompt, effective and prolonged anesthesia without signs of local irritation or of systemic intoxication. When used in 1:1,000 solution with epinephrin, nupercain has been found fully as effective as a 1 per cent solution of procain hydrochlorid for infiltration anesthesia prior to tonsillectomy. Nupercain has the advantage over procain for infiltration in that the duration of the anesthesia produced by the former far exceeds that following injection of the latter; as a consequence, the tendency for postoperative bleeding is less when nupercain is used as the anesthetic agent. In the routine operative work in the rhinolaryngologic clinic at the Polyclinic Hospital, nupercain has been employed in 87 submucous resections, 36 ethmoidectomies, 29 intranasal antrotomies, 41 turbinectomies, and 212 tonsillectomies. The author describes his method of procedure in each of these operations.—*Laryngoscope.*

CLINICAL NOTES AND CASE REPORTS

RAT-BITE FEVER

REPORT OF CASE

By GEORGE E. KOERBER, M. D.
San Leandro

RAT-BITE fever is a disease occasionally seen in the United States, some fourscore cases having been reported in this country up to 1931. Reports of several recent cases have also appeared in the journals.

It is not the purpose of this communication to describe the disease academically, but simply to present a case history which illustrates its typical course.

REPORT OF CASE

T. T., a boy of twelve, was admitted to the Alameda County Hospital on March 27, 1934, with the complaint of recurring bouts of fever. Two months previously he had been bitten by a rat in one of the large public markets in Oakland. He had thought the rat was a guinea-pig and tried to catch it. The boy said the rat had acted sick, and this is probably so, or he could never have gotten so close to it. After being bitten, he went to a doctor, who applied iodin and a small dressing.

The wound healed rapidly, and for three weeks nothing further was thought of it. Then the site of the injury, the right palm near the base of the thumb, became inflamed and swollen. He again went to a doctor, who lanced the swelling but obtained no pus. At this time the doctor discovered axillary adenopathy. The hand healed rapidly after incision.

Two weeks after this, the attacks of fever began. They occurred regularly on Monday and Tuesday of each week, lasting about forty-eight hours, and at regular seven-day intervals. The boy entered the hospital on a Tuesday, toward the close of his third recurrence.

Each attack was characterized by extreme weakness, backache, an ache in the right arm, moderate chills, a high fever, and very severe night sweats. Between the bouts the boy felt fairly well.

Examination at entry revealed: (1) A temperature of 105.8 degrees Fahrenheit. (2) Tenderness in the left upper quadrant, with a barely palpable spleen. (3) Generalized lymphadenopathy, enlarged glands being felt in the neck, both axillae, and the inguinal regions, the glands in the right axilla being largest and most tender. (4) No skin lesions were found, and they were denied in the history.

A number of blood smears were taken at entry, while the fever was still at its height, and examined after staining with both Wright's and Giemsa's. These were negative. A lymph-node was aspirated the following day and the fluid examined, but no spirochetes found, either in darkfield or stained specimens.

The white blood count was 14,900, with 82 per cent neutrophils. Red count, 3,660,000; hemoglobin, 10.8 grams, or 64 per cent. Urinalysis was negative. Further laboratory work included: (1) Agglutination against organisms of undulant fever and tularemia, both negative. (2) Blood culture, which was negative.

After being in the hospital five days, the fourth bout of fever began. During this recurrence, one of the large axillary glands was removed surgically. Material from this gland was inoculated into two rats. Microscopic section of the gland itself showed only hyperplastic lymphatic structure. Blood obtained from the patient by venipuncture was inoculated into a guinea-pig after citration.